

CLAIM AMENDMENTS

- 1 1. (Original) A method for selecting a victim to be used during resolution of a
2 deadlock, the method comprising the steps of:
3 initially establishing a plurality of resources involved in said deadlock as a set of
4 candidates to be said victim;
5 performing a first filtering pass that removes candidates from said set based on
6 CAN-BE-VICTIM flags associated with said candidates;
7 if more than a single candidate remains in said set after said first filtering pass,
8 then performing a second filtering pass that removes candidates from said
9 set based on priorities associated with said candidates; and
10 if more than a single candidate remains in said set after said second filtering pass,
11 then performing a third filtering pass that removes candidates from said set
12 based on runtimes associated with possessory entities associated with said
13 candidates; and
14 when said set has been filtered to include a single candidate, selecting said
15 candidate as said victim.
- 1 2. (Original) The method of Claim 1 wherein at least a portion of the priority of
2 a given resource is established dynamically.

1 3. (Original) The method of Claim 2 wherein said portion is established based
2 on which other resources are held by a possessory entity associated with the given
3 resource.

1 4. (Original) The method of Claim 1 wherein at least a portion of the priority of
2 a given resource is established statically.

1 5. (Original) The method of Claim 4 wherein said portion is established based
2 on the type of the given resource.

1 6. (Currently Amended) A method for selecting a victim to be used during
2 resolution of a deadlock, the method comprising the steps of:
3 initially establishing a plurality of candidates involved in said deadlock as
4 candidates to be said victim;
5 filtering said plurality of candidates based on one or more factors until a single
6 candidate remains as a candidate to be said victim, wherein the step of
7 filtering comprises filtering each candidate of the plurality of candidates by
8 taking into account, for each candidate, at least one factor of the one or
9 more factors; and
10 selecting said single candidate as the victim to be used during resolution of said
11 deadlock.

- 1 7. (Original) The method of Claim 6 wherein the step of filtering further
2 includes removing from said plurality of candidates any candidates that have a
3 CAN-BE-VICTIM flag that indicates the candidate cannot be a victim.
- 1 8. (Original) The method of Claim 6 wherein the step of filtering further
2 includes removing from said plurality of candidates the candidates whose resource
3 priority is higher than the resource priority of at least one of the other candidates.
- 1 9. (Original) The method of Claim 6 wherein the step of filtering further
2 includes removing from said plurality of candidates all the candidates that are
3 associated with possessory entities have been running for a duration of time that is
4 relatively longer than the duration of time that possessory entities associated with
5 the other candidates have been running.
- 1 10. (Original) The method of Claim 6 wherein the step of filtering further
2 includes the computer implemented steps of:
3 removing some candidates from the plurality of candidates in a first pass based on
4 a first factor wherein the candidates left is a first subset of candidates; and
5 removing some candidates from the first subset of candidates in a second pass
6 based on a second factor that is different from the first factor.
- 1 11. (Original) The method of Claim 10 wherein the candidates left after said
2 second pass is a second subset of candidates and wherein the second pass based

3 on the second factor is only performed if after performing the first pass more than
4 one candidate is in the first subset of candidates.

1 12. (Original) The method of Claim 11 further comprising the computer-
2 implemented step of performing a third pass based on a third factor only if after
3 performing the first and the second pass more than one candidate is in the second
4 subset of candidates wherein the third factor is different from the first factor and
5 the second factor.

1 13. (Currently Amended) The method of Claim 6 wherein the step for filtering further
2 comprises the computer-implemented steps of:
3 performing a first pass to filter out any candidates that have a CAN-BE-VICTIM
4 flag indicating that one is not candidate for termination;
5 if more than one candidate is left after performing the first pass, then performing a
6 second pass to filter out any candidates whose resource priority is higher
7 than the resource priority of at least one of the other candidates;
8 if more than one candidate is left after performing the second pass, then
9 performing a third pass to filter out all the candidates except the candidate
10 that has been running for the shortest duration of time.

1 14. (Original) The method of Claim 6 wherein the step of filtering includes
2 filtering based on priorities established for said candidates.

1 15. (Original) The method of Claim 14 wherein at least a portion of the priority
2 of a given candidate is established dynamically.

1 16. (Original) The method of Claim 15 wherein said portion is established based
2 on which resources other than said candidate are held by a possessory entity
3 associated with the given candidate.

1 17. (Original) The method of Claim 14 wherein at least a portion of the priority
2 of a given candidate is established statically.

1 18. (Original) The method of Claim 17 wherein said portion is established based
2 on the type of the given candidate.

1 19. (Original) A computer-readable medium carrying instructions for selecting a
2 victim to be used during resolution of a deadlock, the computer-readable medium
3 comprising instructions for performing the steps of:
4 initially establishing a plurality of resources involved in said deadlock as a set of
5 candidates to be said victim;
6 performing a first filtering pass that removes candidates from said set based on
7 CAN-BE-VICTIM flags associated with said candidates;
8 if more than a single candidate remains in said set after said first filtering pass,
9 then performing a second filtering pass that removes candidates from said
10 set based on priorities associated with said candidates; and

11 if more than a single candidate remains in said set after said second filtering pass,
12 then performing a third filtering pass that removes candidates from said set
13 based on runtimes associated with possessory entities associated with said
14 candidates; and
15 when said set has been filtered to include a single candidate, selecting said
16 candidate as said victim.

1 20. (Original) The computer-readable medium of Claim 19 wherein at least a
2 portion of the priority of a given resource is established dynamically.

1 21. (Original) The computer-readable medium of Claim 20 wherein said portion
2 is established based on which other resources are held by a possessory entity
3 associated with the given resource.

1 22. (Original) The computer-readable medium of Claim 19 wherein at least a
2 portion of the priority of a given resource is established statically.

1 23. (Original) The computer-readable medium of Claim 22 wherein said portion
2 is established based on the type of the given resource.

1 24. (Currently Amended) A computer-readable medium carrying instructions for
2 selecting a victim to be used during resolution of a deadlock, the computer-
3 readable medium carrying instructions for performing the steps of:

4 initially establishing a plurality of candidates involved in said deadlock as
5 candidates to be said victim;
6 filtering said plurality of candidates based on one or more factors until a single
7 candidate remains as a candidate to be said victim, wherein the step of
8 filtering comprises filtering each candidate of the plurality of candidates by
9 taking into account, for each candidate, at least one factor of the one or
10 more factors; and
11 selecting said single candidate as the victim to be used during resolution of said
12 deadlock.

1 25. (Original) The computer-readable medium of Claim 24 wherein the step of
2 filtering further includes removing from said plurality of candidates any
3 candidates that have a CAN-BE-VICTIM flag that indicates the candidate cannot
4 be a victim.

1 26. (Original) The computer-readable medium of Claim 24 wherein the step of
2 filtering further includes removing from said plurality of candidates the candidates
3 whose resource priority is higher than the resource priority of at least one of the
4 other candidates.

1 27. (Original) The computer-readable medium of Claim 24 wherein the step of
2 filtering further includes removing from said plurality of candidates all the
3 candidates that are associated with possessory entities have been running for a

4 duration of time that is relatively longer than the duration of time that possessory
5 entities associated with the other candidates have been running.

1 28. (Original) The computer-readable medium of Claim 24 wherein the step of
2 filtering further includes the computer implemented steps of:
3 removing some candidates from the plurality of candidates in a first pass based on
4 a first factor wherein the candidates left is a first subset of candidates; and
5 removing some candidates from the first subset of candidates in a second pass
6 based on a second factor that is different from the first factor.

1 29. (Original) The computer-readable medium of Claim 28 wherein the
2 candidates left after said second pass is a second subset of candidates and wherein
3 the second pass based on the second factor is only performed if after performing
4 the first pass more than one candidate is in the first subset of candidates.

1 30. (Original) The computer-readable medium of Claim 29 further comprising
2 instructions for the computer-implemented step of performing a third pass based
3 on a third factor only if after performing the first and the second pass more than
4 one candidate is in the second subset of candidates wherein the third factor is
5 different from the first factor and the second factor.

1 31. (Currently Amended) The computer-readable medium of Claim 24 wherein the
2 step for filtering further comprises the computer-implemented steps of:

3 performing a first pass to filter out any candidates that have a CAN-BE-VICTIM
4 flag indicating that one is not candidate for termination;
5 if more than one candidate is left after performing the first pass, then performing a
6 second pass to filter out any candidates whose resource priority is higher
7 than the resource priority of at least one of the other candidates;
8 if more than one candidate is left after performing the second pass, then
9 performing a third pass to filter out all the candidates except the candidate
10 that has been running for the shortest duration of time.

1 32. (Original) The computer-readable medium of Claim 24 wherein the step of
2 filtering includes filtering based on priorities established for said candidates.

1 33. (Original) The computer-readable medium of Claim 32 wherein at least a
2 portion of the priority of a given candidate is established dynamically.

1 34. (Original) The computer-readable medium of Claim 33 wherein said portion
2 is established based on which resources other than said candidate are held by a
3 possessory entity associated with the given candidate.

1 35. (Original) The computer-readable medium of Claim 32 wherein at least a
2 portion of the priority of a given candidate is established statically.

1 36. (Original) The computer-readable medium of Claim 35 wherein said portion
2 is established based on the type of the given candidate.